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# (12) United States Patent

## Wang

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### (54) METHOD AND SYSTEM FOR PROVIDING WIRELESS MOBILE SERVER AND PEER-TO-PEER SERVICES WITH DYNAMIC DNS UPDATE

(75) Inventor: **Jin Wang, Lisle, IL (US)**

(73) Assignee: **Lucent Technologies Inc., Murray Hill, NJ (US)**

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(22) Filed: **Dec. 4, 1998**

(51) Int. Cl.<sup>7</sup> ..... **H04Q 7/24**

(52) U.S. Cl. .... **370/338; 370/342**

(58) Field of Search ..... **370/401, 351-354, 370/328, 329, 389, 475, 431, 437, 337, 442; 455/432, 433, 435, 436, 450; 709/223, 217, 227, 245, 249**

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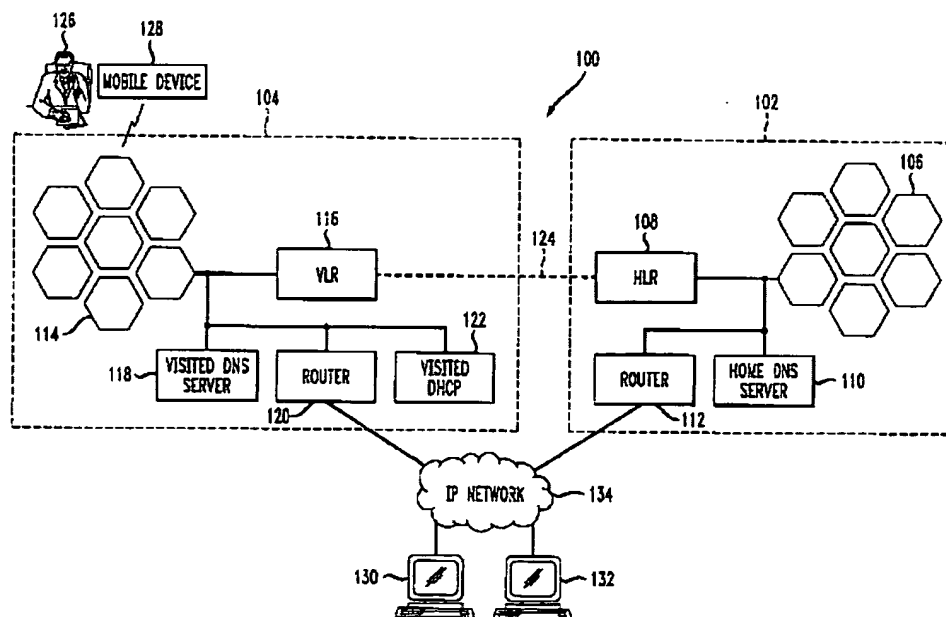
Primary Examiner—Dang Ton

Assistant Examiner—Melanie Jagannathan

### (57) ABSTRACT

A method and communications system provide data and voice services to subscribers at mobile terminals using dynamic IP address assignment and dynamic DNS update. A visited network dynamically assigns one of its IP addresses to a mobile terminal away from its home network accessing the visited network as a session IP address. The visited network transmits the assigned IP address to the home network of the mobile terminal over a private network. The home network associates the assigned IP address from the visited network with the host name of the mobile terminal in a DNS server of the home network and sends the host name to the visited network, although the visited network may already have received the host name from the mobile terminal. The visited network associates the host name of the mobile terminal with the assigned IP address its DNS server. Upon termination of the call by the mobile terminal, the visited network disassociates the assigned IP address with the host name in its DNS server and instructs the home network to do the same.

19 Claims, 4 Drawing Sheets

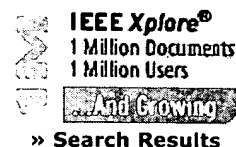




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